

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/006123

## A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl<sup>7</sup> C10M133/16, 139/00, 141/12// (C10M141/12, 133:16, 139:00),  
C10N20:04, 30:00, 30:04, 30:06, 40:25

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> C10M101/00-177/00, C10N10:00-80:00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2005  
Kokai Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2002-105478 A (Nippon Mitsubishi Oil Corp.), 10 April, 2002 (10.04.02), Claims; Par. Nos. [0004] to [0014], [0022]; examples & US 2002/0072478 A1 & US 2003/0220206 A1	1-8
X	JP 2003-113391 A (Nippon Oil Corp.), 18 April, 2003 (18.04.03), Claims; Par. Nos. [0016] to [0054], [0070], [0081]; examples & US 2004/0192562 A1	1-8
Y	JP 2003-73685 A (Nippon Oil Corp.), 12 March, 2003 (12.03.03), Claims; Par. Nos. [0017] to [0019], [0042], [0057]; examples & US 2004/0192562 A1	1-8

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
28 June, 2005 (28.06.05)

Date of mailing of the international search report  
19 July, 2005 (19.07.05)

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 59-500322 A (Edwin Cooper, Inc.), 01 March, 1984 (01.03.84), Claims; page 4, upper left column; page 6, upper right column; examples & WO 83/03616 A1 & US 4325827 A	1-8
Y	JP 63-501155 A (THE LUBRIZOL CORP.), 28 April, 1988 (28.04.88), Claims; page 3, lower left column; examples & WO 87/02663 A1 & US 4997594 A & EP 0608041 A1	1-8